



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
CINCINNATI, OHIO 45268

December 7, 2012

Vinny Nihan – Owner  
Vinny's Bar & Grille  
2205 Dryden Road  
Moraine, Ohio 45439

Dear Mr. Nihan:

Re: Summary of U.S. EPA Sampling Results  
South Dayton Dump and Landfill Site – Vinny's Bar & Grille

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The United States Environmental Protection Agency (U.S. EPA) prepared this letter to inform you of the results of the sub-slab (space under your building floor) air sampling collected from your property in July 2012. The sub-slab air samples were collected as part of the vapor intrusion (VI) investigation at the South Dayton Dump and Landfill (SDDL) Site.

U.S. EPA's technical consultant, WESTON Solutions, installed and collected two sub-slab air samples to determine if solvent- or petroleum-related compounds (see Table 1) are present in soil vapor beneath the foundation of your property at concentrations which exceed sub-slab VI screening levels, as established by the Ohio Department of Health (ODH).

VI is the migration of volatile chemicals from the subsurface into overlying buildings. VI is a potential concern at any building, existing or planned, located near soil, groundwater, or soil vapor containing solvent- or petroleum-related compounds that may volatilize or chemicals that are combustible.

The samples were collected by WESTON Solutions and submitted to Air Toxics Ltd. WESTON Solutions received and validated the results of the laboratory analysis. A copy of the validated results can be found in **Attachment A**.

The ODH has recommended the screening levels for sub-slab air samples. The screening levels represent concentrations of a substance that are unlikely to cause harmful (adverse) health effects in exposed people. A summary of the analytical results can be found in Table 1. All of the air samples are measured in units called parts per billion by volume (ppbv).

**TABLE 1**  
**SUMMARY OF SUB-SLAB AIR SAMPLING RESULTS**

Building / Probe	Sampling Date	Sample Type	Parameter	ODH Screening Level (ppbv)	Detected Concentration (ppbv)
Building 28 Probe A	7-12-12	Sub-slab	All parameters which showed detections were at concentration levels below the ODH respective screening levels.		
Building 28 Probe B	7-12-12	Sub-slab	PCE	250	110

Notes:

PCE = Tetrachloroethene

ppbv = parts per billion by volume

***What do these results mean?***

In July 2012, all compounds in Probe A were detected at concentrations less than the ODH screening levels for sub-slab air samples. The compound tetrachloroethene (PCE) was detected in Probe B at a concentration of 100 ppbv, which is below the ODH PCE sub-slab screening level of 250 ppbv. Based on the laboratory results of the sub-slab air samples collected from your property, the U.S. EPA and ODH conclude that no additional sampling is required, at this time.

The U.S. EPA and ODH would like to take this opportunity to thank you for participating in this important investigation.

If you have health-related questions, please contact Dr. Bob Frey at the ODH at 614-466-1069. If you have questions related to the sampling or on-going site investigation, please visit our website at [www.epaosc.org/southdaytonedumpsite](http://www.epaosc.org/southdaytonedumpsite) or contact me at 513-569-7539.

Sincerely,



Steven L. Renninger  
On-Scene Coordinator  
U.S. EPA Region 5

Attachments:

A – Validated Analytical Results

cc: Leslie Patterson - U.S. EPA Remedial Program Manager  
Laura Marshall - Ohio EPA, Site Coordinator  
Adam Loney, CRA  
Site File

**ATTACHMENT A**  
**VALIDATED ANALYTICAL RESULTS**

**SOUTH DAYTON LANDFILL  
MORaine, MONTGOMERY COUNTY, OHIO  
DATA VALIDATION REPORT**

**Date:** July 26, 2012

**Laboratory:** Air Toxics Ltd. (Air Toxics), Folsom, California

**Laboratory Project #:** 1207251

**Data Validation Performed By:** Lisa Graczyk, Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START)

**Weston Analytical Work Order #/TDD #:** 20405.016.008.1869.00/S05-0008-1206-003

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for 3 air sample collected for the South Dayton Landfill Site that were analyzed for the following parameters and methods.

- Volatile Organic Compounds (VOC) by TO-15
- Methane by ASTM Method D-1946

A level II data package was requested from Air Toxics. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

**VOCs BY U.S. EPA METHOD TO-15**

**1. Samples**

The following table summarizes the samples for which this data validation is being conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Analyzed</b>
2230Dryden-SS-071212	1207251A-01A	Air	7/12/2012	7/17/2012
2205ADryden-SS-071212	1207251A-02A	Air	7/12/2012	7/17/2012
2205BDryden-SS-071212	1207251A-03A	Air	7/12/2012	7/17/2012

**2. Holding Times**

The samples were analyzed within the required holding time limit of 30 days from sample collection.

**3. Blanks**

A method blank was analyzed with the VOC analysis and was free of target compound contamination above the reporting limit.

**4. Surrogate Results**

The surrogate recovery results were within the laboratory-established quality control (QC) limits.

**5. Continuing Calibration Results**

The continuing calibration results were within the QC limits for percent recovery except for chloromethane which had a recovery above the QC limit. Because chloromethane was not detected in the samples, no qualification was required.

**6. Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate (LCSD) recoveries were within laboratory QC limits except for as follows. In the LCS and LCSD, carbon disulfide was detected slightly above the QC limit. Because carbon disulfide was not detected in the samples qualifications were not required.

**7. Overall Assessment**

The VOC data are acceptable for use based on the information received.

## **METHANE BY ASTM D-1946**

### **1. Samples**

The following table summarizes the samples for which this data validation is being conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Analyzed</b>
2230Dryden-SS-071212	1207251B-01A	Air	7/12/2012	7/17/2012
2205ADryden-SS-071212	1207251B-02A	Air	7/12/2012	7/17/2012
2205BDryden-SS-071212	1207251B-03A	Air	7/12/2012	7/17/2012

### **2. Holding Times**

The sample was analyzed within the required holding time limit of 30 days from sample collection.

### **3. Blanks**

A method blank was analyzed with the methane analyses and was free of target compound contamination above the reporting limit.

### **4. LCS Results**

The LCS and LCSD recoveries were within laboratory QC limits.

### **5. Overall Assessment**

The methane data are acceptable for use based on the information received.

Data Validation Report  
South Dayton Landfill Site  
Air Toxics Ltd.  
Laboratory Project #: 1207251

**ATTACHMENT**

**AIR TOXICS LTD.  
RESULTS SUMMARY**





Air Toxics

Client Sample ID: 2205ADryden-SS-071212

Lab ID#: 1207251A-02A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j071726	Date of Collection:	7/12/12 9:25:00 AM
Dil. Factor:	1.75	Date of Analysis:	7/17/12 10:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.88	1.6	4.3	7.9
Freon 114	0.88	Not Detected	6.1	Not Detected
Chloromethane	8.8	Not Detected	18	Not Detected
Vinyl Chloride	0.88	Not Detected	2.2	Not Detected
1,3-Butadiene	0.88	Not Detected	1.9	Not Detected
Bromomethane	8.8	Not Detected	34	Not Detected
Chloroethane	3.5	Not Detected	9.2	Not Detected
Freon 11	0.88	2.6	4.9	14
Ethanol	3.5	Not Detected	6.6	Not Detected
Freon 113	0.88	Not Detected	6.7	Not Detected
1,1-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Acetone	8.8	Not Detected	21	Not Detected
2-Propanol	3.5	Not Detected	8.6	Not Detected
Carbon Disulfide	3.5	Not Detected	11	Not Detected
3-Chloropropene	3.5	Not Detected	11	Not Detected
Methylene Chloride	8.8	Not Detected	30	Not Detected
Methyl tert-butyl ether	0.88	Not Detected	3.2	Not Detected
trans-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Hexane	0.88	Not Detected	3.1	Not Detected
1,1-Dichloroethane	0.88	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.5	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	0.88	Not Detected	3.5	Not Detected
Tetrahydrofuran	0.88	Not Detected	2.6	Not Detected
Chloroform	0.88	Not Detected	4.3	Not Detected
1,1,1-Trichloroethane	0.88	34	4.8	180
Cyclohexane	0.88	Not Detected	3.0	Not Detected
Carbon Tetrachloride	0.88	Not Detected	5.5	Not Detected
2,2,4-Trimethylpentane	0.88	Not Detected	4.1	Not Detected
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.88	Not Detected	3.5	Not Detected
Heptane	0.88	Not Detected	3.6	Not Detected
Trichloroethene	0.88	Not Detected	4.7	Not Detected
1,2-Dichloropropane	0.88	Not Detected	4.0	Not Detected
1,4-Dioxane	3.5	Not Detected	13	Not Detected
Bromodichloromethane	0.88	Not Detected	5.9	Not Detected
cis-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
4-Methyl-2-pentanone	0.88	Not Detected	3.6	Not Detected
Toluene	0.88	Not Detected	3.3	Not Detected
trans-1,3-Dichloropropene	0.88	Not Detected	4.0	Not Detected
1,1,2-Trichloroethane	0.88	Not Detected	4.8	Not Detected
Tetrachloroethene	0.88	Not Detected	5.9	Not Detected
2-Hexanone	3.5	Not Detected	14	Not Detected



Air Toxics

Client Sample ID: 2205ADryden-SS-071212

Lab ID#: 1207251A-02A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j071726	Date of Collection:	7/12/12 9:25:00 AM
Dil. Factor:	1.75	Date of Analysis:	7/17/12 10:33 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.88	Not Detected	7.4	Not Detected
1,2-Dibromoethane (EDB)	0.88	Not Detected	6.7	Not Detected
Chlorobenzene	0.88	Not Detected	4.0	Not Detected
Ethyl Benzene	0.88	Not Detected	3.8	Not Detected
m,p-Xylene	0.88	Not Detected	3.8	Not Detected
o-Xylene	0.88	Not Detected	3.8	Not Detected
Styrene	0.88	Not Detected	3.7	Not Detected
Bromoform	0.88	Not Detected	9.0	Not Detected
Cumene	0.88	Not Detected	4.3	Not Detected
1,1,2,2-Tetrachloroethane	0.88	Not Detected	6.0	Not Detected
Propylbenzene	0.88	Not Detected	4.3	Not Detected
4-Ethyltoluene	0.88	Not Detected	4.3	Not Detected
1,3,5-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,2,4-Trimethylbenzene	0.88	Not Detected	4.3	Not Detected
1,3-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,4-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
alpha-Chlorotoluene	0.88	Not Detected	4.5	Not Detected
1,2-Dichlorobenzene	0.88	Not Detected	5.3	Not Detected
1,2,4-Trichlorobenzene	3.5	Not Detected	26	Not Detected
Hexachlorobutadiene	3.5	Not Detected	37	Not Detected

## Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	88	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: 2205BDryden-SS-071212

Lab ID#: 1207251A-03A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j071727

Date of Collection: 7/12/12 9:37:00 AM

Dil. Factor: 1.71

Date of Analysis: 7/17/12 10:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.86	Not Detected	4.2	Not Detected
Freon 114	0.86	Not Detected	6.0	Not Detected
Chloromethane	8.6	Not Detected	18	Not Detected
Vinyl Chloride	0.86	Not Detected	2.2	Not Detected
1,3-Butadiene	0.86	Not Detected	1.9	Not Detected
Bromomethane	8.6	Not Detected	33	Not Detected
Chloroethane	3.4	Not Detected	9.0	Not Detected
Freon 11	0.86	Not Detected	4.8	Not Detected
Ethanol	3.4	Not Detected	6.4	Not Detected
Freon 113	0.86	Not Detected	6.6	Not Detected
1,1-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Acetone	8.6	Not Detected	20	Not Detected
2-Propanol	3.4	Not Detected	8.4	Not Detected
Carbon Disulfide	3.4	Not Detected	11	Not Detected
3-Chloropropene	3.4	Not Detected	11	Not Detected
Methylene Chloride	8.6	Not Detected	30	Not Detected
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected
trans-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Hexane	0.86	Not Detected	3.0	Not Detected
1,1-Dichloroethane	0.86	Not Detected	3.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.4	Not Detected	10	Not Detected
cis-1,2-Dichloroethene	0.86	Not Detected	3.4	Not Detected
Tetrahydrofuran	0.86	Not Detected	2.5	Not Detected
Chloroform	0.86	Not Detected	4.2	Not Detected
1,1,1-Trichloroethane	0.86	7.3	4.7	40
Cyclohexane	0.86	Not Detected	2.9	Not Detected
Carbon Tetrachloride	0.86	Not Detected	5.4	Not Detected
2,2,4-Trimethylpentane	0.86	Not Detected	4.0	Not Detected
Benzene	0.86	Not Detected	2.7	Not Detected
1,2-Dichloroethane	0.86	Not Detected	3.5	Not Detected
Heptane	0.86	Not Detected	3.5	Not Detected
Trichloroethene	0.86	Not Detected	4.6	Not Detected
1,2-Dichloropropane	0.86	Not Detected	4.0	Not Detected
1,4-Dioxane	3.4	Not Detected	12	Not Detected
Bromodichloromethane	0.86	Not Detected	5.7	Not Detected
cis-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
4-Methyl-2-pentanone	0.86	Not Detected	3.5	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
trans-1,3-Dichloropropene	0.86	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	0.86	Not Detected	4.7	Not Detected
Tetrachloroethene	0.86	110	5.8	750
2-Hexanone	3.4	Not Detected	14	Not Detected



Air Toxics

Client Sample ID: 2205BDryden-SS-071212

Lab ID#: 1207251A-03A

## EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j071727	Date of Collection:	7/12/12 9:37:00 AM
Dil. Factor:	1.71	Date of Analysis:	7/17/12 10:51 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	0.86	Not Detected	7.3	Not Detected
1,2-Dibromoethane (EDB)	0.86	Not Detected	6.6	Not Detected
Chlorobenzene	0.86	Not Detected	3.9	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
m,p-Xylene	0.86	Not Detected	3.7	Not Detected
o-Xylene	0.86	Not Detected	3.7	Not Detected
Styrene	0.86	Not Detected	3.6	Not Detected
Bromoform	0.86	Not Detected	8.8	Not Detected
Cumene	0.86	Not Detected	4.2	Not Detected
1,1,2,2-Tetrachloroethane	0.86	Not Detected	5.9	Not Detected
Propylbenzene	0.86	Not Detected	4.2	Not Detected
4-Ethyltoluene	0.86	Not Detected	4.2	Not Detected
1,3,5-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,2,4-Trimethylbenzene	0.86	Not Detected	4.2	Not Detected
1,3-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,4-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
alpha-Chlorotoluene	0.86	Not Detected	4.4	Not Detected
1,2-Dichlorobenzene	0.86	Not Detected	5.1	Not Detected
1,2,4-Trichlorobenzene	3.4	Not Detected	25	Not Detected
Hexachlorobutadiene	3.4	Not Detected	36	Not Detected

## Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
Toluene-d8	92	70-130
1,2-Dichloroethane-d4	104	70-130
4-Bromofluorobenzene	91	70-130

Client Sample ID: 2205ADryden-SS-071212

Lab ID#: 1207251B-02A

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

File Name:	9071711	Date of Collection: 7/12/12 9:25:00 AM
Dil. Factor:	1.75	Date of Analysis: 7/17/12 03:29 PM

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00018	Not Detected

Container Type: 6 Liter Summa Canister

**Client Sample ID: 2205BDryden-SS-071212**

**Lab ID#: 1207251B-03A**

**NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946**

<b>File Name:</b>	<b>9071712</b>	<b>Date of Collection: 7/12/12 9:37:00 AM</b>
<b>Dil. Factor:</b>	<b>1.71</b>	<b>Date of Analysis: 7/17/12 03:58 PM</b>

<b>Compound</b>	<b>Rpt. Limit (%)</b>	<b>Amount (%)</b>
Methane	0.00017	Not Detected

**Container Type: 6 Liter Summa Canister**